AMENDMENT AND RESPONSE UNDER 37 CFR ' 1.116—EXPEDITED PROCEDURE

Serial Number: 09/459703

Filing Date: December 13, 1999

Title: SYSTEM AND METHOD FOR REPRODUCING SYSTEM EXECUTIONS USING A REPLAY HANDLER (As Amended)

Assignee: Intel Corporation

REMARKS

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Dkt: 884.027US1 (INTEL)

Applicant has carefully reviewed and considered the Office Action mailed on June 30, 2004, and the references cited therewith.

Applicant proposes the following. Amendments to claims 1, 6, 10, 17, 20, 21, and 23, the addition of claims 24-26, and the cancellation of claim 3. Thus, claims 1, 2, and 4-26 are now pending in this application.

About the Proposed Claim Amendments

Applicant proposes that the following claim amendments be entered.

- Independent claim 1 has been rewritten to include features similar to those of cancelled claim 3.
- Dependent claim 3 has been cancelled.
- Independent claim 6 has been amended to further distinguish over Deao.
- Independent claims 10 and 21 have been amended to correct typographical errors.
- Independent claim 17, 20, and 23 have been amended to include features that further distinguish them over Deao.
- Dependent claims 24, 25 and 26 have been added. Support for dependent claim 24 can be found in the instant application on Page 5, Lines 25-27. Support for dependent claims 25 and 26 can be found in the instant application on Page 7, Lines 18-20.

\$102 Rejection of the Claims

Claims 1-8, 10, 11, 14-20, 22, and 23 were rejected under 35 USC § 102(e) as being anticipated by Deao et al. (U.S. 5,065,106, hereinafter referred to as Deao). Applicant respectfully traverses this rejection because Deao does not anticipate the claimed invention, as set forth in claims 1-8, 10, 11, 14-20, 22, and 23.

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *In re Dillon* 919 F.2d 688, 16 USPQ 2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991). It is not enough, however, that the prior art reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed

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invention, arranged as in the claim." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).

Applicant respectfully submits that the Office Action did not make out a *prima facie* case of anticipation because the reference does not teach each and every element of the rejected claims.

The Office Action mailed June 30, 2004 and labeled Paper Number 21 (hereinafter referred to as Office Action 21) incorporates by reference "paper 13", which was mailed September 4, 2002. Applicant presumes Office Action 21 incorporates by reference the Office Action mailed September 4, 2003.

Regarding amended independent claim 1, Paper 13 asserts that Deao's "sequence of debug instructions is the replay/restart handler". However, Applicant respectfully submits the claimed "replay handler" of amended claim 1 is altogether different from Deao's sequence of emulation-event-triggered debug instructions. Applicant has proposed amendments to independent claim 1 that include features of now cancelled rejected dependent claim 3. Specifically, Applicant proposes that independent claim 1 now include the feature "wherein in response to receiving a single replay indicator, the processor is configured to test itself by repeatedly executing a plurality of instructions using a replay handler loaded into the memory hierarchy." Deao's Figure 45, Block 4520 shows that a software breakpoint is required to trigger each additional emulation event. Applicant cannot find, and Office Action 21 and Paper 13 do not point to any passage in Deao that teaches or suggests the cited "replay handler" claim feature.

Rejected independent claims 6, 10, 17, 20, and 23 include features similar to the cited claimed feature of independent claim 1. Specifically, they include the following.

- Proposed amended independent claim 6 recites "wherein upon receiving a replay break, ... the processor executes the replay handler to repeatedly replay at least one execution."
- Proposed amended independent claim 10 recites "generates a signal to the
 processor to cause the processor to load the replay handler into the memory
 hierarchy and repeatedly replay the at least one execution."

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Proposed amended independent claim 17 recites "in response to a replay signal ...
repeatedly replaying at least one execution to test for proper operation of a
processor."

- Proposed amended independent claim 20 recites "in response to a replay break ...
 replaying a system execution a number of times."
- Proposed amended independent claim 23 recites "testing the processor in response to the processor receiving a replay break, wherein the testing includes ... repeatedly replaying the at least one execution."

Rejected dependent claims 2, 4, 5, 7, 8, 11, 14-16, 18, 19, and 22 each depend, directly or indirectly on one of independent claims 1, 6, 10, 17, 20, or 23. As such, dependent claims 2, 4, 5, 7, 8, 11, 14-16, 18, 19, and 22 each include the features of the claims on which they depend. For at least the reasons noted above, Applicant respectfully submits that Deao does not teach each and every element of claims 1, 2, 4-8, 10, 11, 14-20, 22, and 23.

§103 Rejection of the Claims

Claims 9, 12, 13, and 21 were rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 6,065,106 (referred to herein as Deao). Applicant respectfully traverses this rejection because the Office Action has not established a *prima facie* case of obviousness regarding the claims noted above.

The Examiner rejected claims 9, 12, 13, and 21 based on Deao. Applicant respectfully traverses the single reference rejection under 35 U.S.C. § 103 because Deao does not teach or suggest all of the recited claim elements. Since all the elements of the claims are not found in the reference, Applicant assumes that the Examiner is taking official notice of the missing elements. Applicant respectfully objects to this pursuant to M.P.E.P. § 2144.03 and requests that the Examiner cite references in support of this position

Additionally, dependent claims 9, 12, 13, and 21 each depend directly or indirectly from one of independent claims 6, 10, and 20. Because the rejection under 35 USC §103 does not add any teaching or suggestion to Deao, Applicant respectfully submits that dependent claims 9, 12, 13, and 21 are patentable over Deao for at least the reasons discussed above, with reference to claims 6, 10, and 20.

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Reservation of Rights

Applicant does not admit that patents cited under 35 U.S.C. §§ 102(a), 102(e), 103/102(a), or 103/102(e) are prior art, and reserves the right to swear behind them at a later date. Arguments presented to distinguish such patents should not be construed as admissions that they are prior art.

Conclusion

Based on the foregoing, Applicant respectfully requests that the rejections be withdrawn. Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2169 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

KIRAN A. PADWEKAR

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. Attorneys for Intel Corporation P.O. Box 2938

Minneapolis, MN 55402

(612) 371-2169

Date 8 30 04

Andrew DeLizio

Reg. No. 52,806

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this day of August, 2004.

Name KACIA LEE

Signature Local Signature

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